CLAIMS

WHAT IS CLAIMED IS:

Sub A1

1. A computer-implemented method for providing a connection between a client and a server, the method comprising:

binding a primary virtual server to a set of URLs, each URL having an associated real server;

receiving a request from a client for connection to the primary virtual server;

selecting one of the real servers for connection with the client;

sending a redirect message to the client specifying the selected real server; and

receiving a new connection request from the client for connection with the selected real server.

2. The method of claim 1 further comprising binding each of the real servers to a virtual server, each pair of real and virtual servers having the same IP address.

3. The method of claim 2 wherein the IP address is associated with the URL of the corresponding real server.

4. The method of claim 2 wherein each pair of real and virtual servers share weight assignments.

5. The method of claim 2 wherein each pair of real and virtual servers share state information.

6. The method of claim 1 wherein the client request is an HTTP request.

7. The method of claim 6 wherein the redirect is an HTTP redirect.

8. The method of claim 1 wherein selecting one of the real servers comprises load balancing the real servers.

9. The method of claim 1 further comprising providing a backup link for each of the real servers to the primary virtual server.

10. The method of claim 1 further comprising providing a backup link for each of the real servers to one of the other real servers.

11. The method of claim 1 further comprising binding an additional real server to the primary virtual server and load sharing between the new real server and the original set of real servers.

12. The method of claim 1 wherein receiving a request from a client comprises receiving a request at a local director.

13. A computer-implemented method for load balancing between servers, comprising:

receiving a request from a client for connection to a primary virtual server, the primary virtual server being bound to a plurality of secondary virtual servers each associated with a real server and having the same address as the real server;

selecting one of the real servers for connection with the client;

sending a redirect message to the client specifying the selected real server;

receiving a new request from the client for connection to the selected real server;

forwarding to the selected real server transmission originating from the client; and

forwarding to the client transmission originating from the selected real server.

14. A computer program product for providing a connection between a client and a server, the product comprising:

code that binds a primary virtual server to a set of URLs, each URL having an associated real server;

code that receives a request from a client for connection to the primary virtual server;

code that selects one of the real servers for connection with the client;

code that sends a redirect message to the client specifying the selected real server;

code that receives a new request from the client for connection to the selected real server; and

a computer-readable storage medium for storing the codes.

15. The computer program product of claim 14 wherein the computer readable medium is selected from the group consisting of CD-ROM, floppy disk, tape, flash memory, system memory, hard drive, and data signal embodied in a carrier wave.

16. The computer program product of claim 14 further comprising code that binds each of the real servers to a virtual server, each pair of real and virtual servers having the same IP address.

17. The computer program product of claim 14 further comprising code that provides a backup server for each of the real servers.

18. A computer program product for binding a plurality of real servers to a primary virtual server for establishing connections between a client and the real servers, the product comprising:

code that creates an identifier to each of the real servers;

code that binds the real servers to the primary virtual server;

code that creates a plurality of secondary virtual servers each associated with one of the real servers and having the same address as the associated real server;

code that binds each of the secondary virtual servers with its associated real server; and

a computer-readable storage medium for storing the codes.

19. The computer program product of claim 18 wherein the real server identifiers are URLs.

20. The computer program product of claim 19 wherein the primary virtual server is bound to the URLs of the real servers.

21. A computer system for providing a connection between a client and a server, the system comprising:

a virtual server;

a plurality of real servers each having an associated URL; and

a processor for binding the virtual server to the URLs of the real servers, selecting one of the real servers for connection to a client, and redirecting a connection request for the virtual server from the client to the selected real server.

22. A system for directing flow between a client and two or more servers, the system comprising:

a primary virtual server bound to a plurality of URLs, each URL having an associated real server;

means for receiving a client request for content;

means for selecting a real server for providing content to the client;

means for providing the URL of the selected real server to the client; and

means for receiving a new connection request from the client for connection to the selected real server.

23. A network apparatus for directing flow between a client and two or more servers, the network apparatus comprising:

memory; and

a processor configured to:

bind a primary virtual server to a set of URLs, each URL having an associated real server;

receive a request from a client for connection to the primary virtual server;

select one of the real servers for connection with the client;

receive a new connection request from the client for connection with the selected real server.

send a redirect message to the client specifying the selected real server; and

receive a new connection request from the client for connection with the selected real server.

Add A2